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**FACSIMILE TRANSMITTAL**

To: Examiner Vanessa T. Velasquez  
Company: Art Group 1793 of US Patent and Trademark Office  
Facsimile No.: 571-270-4587  
From: Lisa Lint (direct dial: 215-656-3308)  
Date: January 10, 2011  
Re: US Patent Application No. 10/582,717 filed 06/12/06  
Docket No.: JFE-06-1127  
Number of Pages (including cover page): Six (6)

If you do not receive all the pages or experience any difficulty receiving this transmission, please call (215) 656-2466.

**Additional Instructions/Comments:**

Dear Examiner Velasquez:

As requested, I have attached copies of Exhibits 1 and 2, which were submitted with the Response dated August 5, 2010. Please let me know if the attached copies are acceptable and if you need anything further. I can be reached by phone at (215)656-3308.

Kindest regards. .

Sincerely,

Lisa Lint

**CONFIDENTIALITY NOTICE**

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EAST44037194.1

## EXHIBIT 1

Item	US 2002/0079028A (Yoshii)	US 2003/0116238A (Fujita)	This application
Field	Color CRT mask frame	Steel pipe for hydroforming	Steel tube for automotive structural parts
Aim	High temperature creep strength	Hydroformability	Fatigue endurance after quenching
V	0.02~0.20	Chemical composition range is unreasonably wide	None
N	0.0040~0.0200		0.0049 or less
O	Not taught	Not taught	0.0008-0.0049
Average ferrite grain size	15 $\mu\text{m}$ or less	Each grain size range: 0.1~200 $\mu\text{m}$ Average grain size: Min. 10 $\mu\text{m}$ (Table 8 and 9)	3.4 to 7.9 $\mu\text{m}$
Grossman's $\chi$ factor	0.87-2.09	0.78 or less	1.2 to 1.7

(1) Yoshii contains V as an indispensable element while N is of a high component system. Hence, Yoshii is different from Claims 1 and 6.

(2) Fujita specifies 0.1 to 200  $\mu\text{m}$  as a range of each of crystal grain sizes and Grossman's factor is 0.78 or less (Table 1-2 in Exhibit 2).

EAST43174289.1

Table 1-1

original	min	max	min	max	C	Si	Mn	P	S	SolAl	N	O	B	Nb	Ti	Cr	Mo	Ni	Cu	V	Sn	Ca	Coq
					0.18	0.08	0.91			0.015			0.0001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.0001	0.40
					0.23	0.45	1.85	0.018	0.0028	0.075	0.0049	0.0049	0.0029	0.019	0.029	0.195	0.195	0.195	0.195	0.195	0.195	0.0028	0.58未改
amended												0.0000								delete			
												0.0049								delete			

US2002/0019028A1 Yoshiz		Chemical Composition (wt. %)																			Reme	
Steel	C	Si	Mn	P	S	SeAl3	N	O	B	Nb	Ti	Cr	Mo	Ni	Cu	V	Sn	Ca	Coq			
1	0.15	0.18	0.87	0.017	0.006	0.035	0.0088						0.35			0.12			0.38			
2	0.15	0.18	0.67	0.017	0.006	0.032	0.0061					0.92	0.35			0.11			0.55			
3	0.15	0.16	0.67	0.017	0.006	0.032	0.0061					0.92	0.35			0.11			0.55			
4	0.15	0.16	0.67	0.017	0.006	0.032	0.0061					0.92	0.35			0.11			0.55			
5	0.15	0.16	0.66	0.017	0.006	0.032	0.0058					0.92	0.35			0.11			0.55			
6	0.15	0.16	0.67	0.017	0.006	0.032	0.0061					0.92	0.35			0.11			0.55			
7	0.15	0.17	0.70	0.015	0.007	0.035	0.0065					0.92	0.35			0.11			0.55			
8	0.16	0.17	0.68	0.015	0.007	0.032	0.0063					0.92	0.35	0.30	0.50	0.10			0.57			
9	0.15	0.15	0.68	0.018	0.005	0.039	0.0066					0.92	0.35	0.50		0.11			0.55			
10	0.06	0.20	0.75	0.020	0.006	0.040	0.0065		0.0020			0.96	0.36			0.19			0.56			
11	0.15	0.16	0.67	0.016	0.008	0.030	0.0051					1.01	0.35			0.12			0.48			
12	0.15	0.20	0.72	0.021	0.006	0.045	0.0067					0.93	0.35			0.10			0.55			
13	0.15	0.19	0.73	0.021	0.006	0.028	0.0056					1.00	0.36			0.08			0.58			
14	0.15	0.19	0.72	0.021	0.006	0.032	0.0047					1.00	0.35			0.04			0.49			
15	0.15	0.19	0.72	0.020	0.006	0.033	0.0053					1.02	0.35			0.08			0.50			
16	0.15	0.19	0.73	0.021	0.006	0.029	0.0048					1.01	0.35			0.12			0.48			
17	0.15	0.19	0.73	0.021	0.006	0.029	0.0048					1.02	0.35			0.02			0.49			
18	0.15	0.19	0.73	0.021	0.006	0.029	0.0048					1.01	0.35			0.02			0.49			
19	0.15	0.16	0.67	0.017	0.008	0.032	0.0061					1.01	0.35			0.02			0.49			
20	0.15	0.16	0.67	0.017	0.008	0.032	0.0061					1.01	0.35			0.02			0.49			
21	0.15	0.16	0.67	0.017	0.008	0.032	0.0061					1.01	0.35			0.02			0.49			
22	0.07	0.19	1.38	0.015	0.001	0.040	0.0050			0.038	0.040	0.05	0.35			0.11			0.54			
23	0.16	0.19	0.70	0.020	0.010	0.045	0.0025					0.92	0.35			0.11			0.54			
24	0.18	0.16	0.72	0.015	0.003	0.051	0.0058			0.037	0.040	0.98	0.34			0.05			0.54			
25	0.17	0.21	0.75	0.019	0.007	0.050	0.0055					0.98	0.34			0.00			0.52			
26	0.15	0.17	0.79	0.019	0.009	0.030	0.0055					0.93	0.34			0.00			0.57			
27	0.16	0.19	0.72	0.018	0.007	0.031	0.0043					0.97	0.34			0.00			0.59			
28	0.01	0.20	0.75	0.020	0.008	0.053	0.0059					0.98	0.35			0.00			0.49			
29	0.15	0.19	0.73	0.021	0.006	0.052	0.0049					1.01	0.35			0.12			0.43			
30	0.15	0.20	0.72	0.021	0.006	0.031	0.0049					1.02	0.35			0.08			0.48			
												0.01							0.28			

Table1

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Table 1

Page 2

Table 1-1 (continued)

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30	0.15	0.20	0.72	0.021	0.006	0.031	0.0043				0.01			0.05	0.05		0.08		0.28
31	0.15	0.22	0.65	0.011	0.008	0.019	0.0090				5.15			0.05	0.05		0.00		1.30
32	0.15	0.16	0.67	0.017	0.006	0.032	0.0061				0.32			0.36			0.11		0.64
33	0.15	0.18	0.67	0.017	0.006	0.032	0.0061				0.32			0.35			0.11		0.64
34	0.32	0.15	0.68	0.055	0.006	0.035	0.0048				0.05			0.35			0.12		0.54
35	0.15	0.33	0.67	0.017	0.007	0.031	0.0068				0.05			0.34			0.11		0.38
36	0.15	0.19	0.02	0.015	0.008	0.046	0.0072				0.05			0.36			0.11		0.28
37	0.15	0.19	1.68	0.017	0.006	0.048	0.0068				0.05			0.34			0.12		0.52
38	0.15	0.16	0.68	0.055	0.007	0.031	0.0083				0.05			0.35			0.11		0.37
39	0.15	0.15	0.70	0.018	0.006	0.035	0.0075				0.05			0.35			0.12		0.37
40	0.15	0.16	0.71	0.021	0.006	0.039	0.0065				0.05			1.08			0.11		0.40
41	0.15	0.16	0.70	0.019	0.007	0.031	0.0073				0.05			0.34			0.12		0.40
42	0.15	0.19	0.70	0.018	0.007	0.038	0.0081				2.12			0.35			0.11		0.78
43	0.15	0.16	0.74	0.018	0.008	0.035	0.0083				0.05			0.01			0.12		0.29
44	0.15	0.17	0.70	0.017	0.006	0.030	0.0058				0.05			0.55			0.11		0.42
45	0.15	0.16	0.69	0.018	0.008	0.035	0.0087				0.05			0.26			0.12		0.37
46	0.15	0.17	0.68	0.016	0.008	0.110	0.0075				0.05			0.35			0.11		0.37
47	0.15	0.19	0.70	0.020	0.006	0.039	0.0085		0.0032		0.05			0.34			0.12		0.37
48	0.15	0.16	0.68	0.021	0.007	0.034	0.0077				0.05			0.35			0.00		0.37
49	0.15	0.19	0.70	0.018	0.006	0.038	0.0028				0.05			0.35			0.00		0.37
50	0.15	0.18	0.87	0.021	0.007	0.035	0.0210				0.05			0.36			0.00		0.37
51	0.15	0.01	0.43	0.010	0.007	0.039	0.0025				0.02			0.36			0.08		0.32

Chemical Composition (wt %)																	Remark		
Steel	C	Si	Mn	P	S	SalA	N	O	B	Nb	Ti	Cr	Mo	Ni	Cu	V	Sp	Ca	Ceq.
A	0.045	0.15	0.3		0.008														0.10
B	0.055	0.6	0.1	0.005	0.005	0.005													0.10
C	0.028	0.01	0.3	0.025	0.007	0.041													0.08
D	0.056	0.03	0.3	0.120	0.006	0.032													0.11
E	0.002	0.05	0.4		0.004	0.010													0.07
F	0.036	0.05	0.2		0.003	0.006													0.07
G	0.002	0.05	0.2		0.005	0.040				0.01	0.05								0.04
H	0.002	0.07	0.3	0.010	0.006	0.046													0.05
I	0.020	0.1	0.2		0.005	0.030													0.08
J	0.002	0.05	0.2	0.020	0.003	0.035			0.0008										0.04
K	0.023	0.1	0.2	0.010	0.004	0.036						0.20							0.10
L	0.003	0.05	0.2	0.010	0.006	0.038								0.10	0.20				0.04
M	0.002	0.1	0.3	0.015	0.003	0.044							0.500						0.18
N	0.020	0.03	0.2		0.002	0.060													0.06
O	0.003	0.08	0.10		0.003	0.050													0.02
P	0.051	0.6	0.70	0.020	0.004	0.036													0.19
Q	0.048	0.5	0.60	0.008	0.008	0.045													0.17
R	0.070	0.8	1.20		0.006	0.040													0.30

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Table1-2

		Grossman X factor of each element																			Total Grossman X factor	
		Steel	C	Si	Mn	P	S	SeAl	N	O	B	Nb	Ti	Cr	Mo	Ni	Cu	V	Sn	Ca		
US2002/0 079028A1 Yoshii	Table 1	1	0.119	0.046	0.510	0.022	-0.003	0.022	0.0068						0.312			0.072			1.11	
		2	0.119	0.046	0.510	0.022	-0.003	0.017	0.0061					0.920	0.312			0.086			2.04	
		3	0.119	0.040	0.510	0.022	-0.003	0.017	0.0061					0.920	0.312			0.086			2.04	
		4	0.119	0.046	0.510	0.022	-0.003	0.017	0.0061					0.920	0.312			0.086			2.04	
		5	0.119	0.046	0.505	0.022	-0.003	0.017	0.0058					0.920	0.312			0.097			1.77	
		6	0.119	0.046	0.510	0.022	-0.003	0.017	0.0061					0.920	0.312			0.086			2.04	
		7	0.119	0.049	0.523	0.022	-0.003	0.022	0.0063					0.930	0.318	###		0.097			2.13	
		8	0.133	0.049	0.519	0.022	-0.003	0.017	0.0063					0.820	0.312	###		0.086			2.03	
		9	0.119	0.043	0.514	0.022	-0.003	0.022	0.0066					0.950	0.318			0.097			2.09	
		10	0.000	0.057	0.544	0.022	-0.003	0.022	0.0065			0.0020			1.010	0.312			0.072			2.04
		11	0.119	0.046	0.510	0.022	-0.003	0.017	0.0051						0.930	0.312			0.097			2.06
		12	0.119	0.057	0.531	0.022	-0.003	0.028	0.0067						1.000	0.318			0.124			2.20
		13	0.119	0.054	0.538	0.022	-0.003	0.017	0.0056						1.000	0.025			0.146			1.92
		14	0.119	0.054	0.531	0.022	-0.003	0.017	0.0047						1.020	0.025			0.124			1.91
		15	0.119	0.054	0.531	0.022	-0.003	0.017							0.506	0.025			0.072			1.34
		16	0.119	0.054	0.538	0.022	-0.003	0.017							0.506	0.025			0.097			1.37
		17	0.119	0.054	0.536	0.022	-0.003	0.017							0.506	0.025			0.097			1.37
		18	0.119	0.054	0.536	0.022	-0.003	0.017							0.506	0.025			0.097			1.37
		19	0.119	0.046	0.510	0.022	-0.003	0.017							0.506	0.025			0.097			1.37
		20	0.119	0.048	0.510	0.022	-0.003	0.017							0.475	0.312			0.086			1.58
		21	0.119	0.048	0.510	0.022	-0.003	0.017							0.475	0.312			0.086			1.58
		22	0.000	0.054	0.772	0.022	-0.003	0.022							0.475	0.312			0.086			1.58
		23	0.133	0.054	0.523	0.022	-0.003	0.028						-0.0430	0.318				0.146			1.29
		24	0.133	0.048	0.531	0.022	-0.003	0.028							0.488	0.188			0.090			1.43
		25	0.146	0.060	0.544	0.022	-0.003	0.017						-0.0430	0.497	0.308			0.111			1.63
		26	0.119	0.049	0.560	0.022	-0.003	0.017							0.497	0.306			0.061			1.65
		27	0.133	0.054	0.531	0.022	-0.003	0.017							0.491	0.013			0.117			1.38
		28	0.179	0.057	0.544	0.022	-0.003	0.028							0.497	0.013			0.061			1.33
		29	0.109	0.054	0.536	0.022	-0.003	0.033							0.506	0.312			0.072			1.72
		30	0.179	0.057	0.531	0.022	-0.003	0.017							0.506				0.097			1.41
													0.508				0.124			1.43		

US2002/0079028A1  
Yoshii

Table 1-2 (continued)

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